

1     WHAT IS CLAIMED IS:

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1. A power control apparatus comprising:

a first driven circuit;

a second driven circuit connected to the  
first driven circuit;

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a primary power-supply circuit for  
producing a primary voltage from a source voltage of a  
battery and supplying the primary voltage to drive the  
first driven circuit;

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a secondary power-supply circuit for  
producing a secondary voltage from the source voltage of  
the battery or from the primary voltage of the primary  
power-supply circuit, and for supplying the secondary  
voltage to drive the second driven circuit; and

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control means for outputting a power-supply  
control signal to the secondary power-supply circuit in  
response to a command signal, so that the supply of the  
secondary voltage to the second driven circuit by the  
secondary power-supply circuit is started or terminated by  
the power-supply control signal.

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1                    2. The apparatus according to claim 1,  
wherein the control means outputs a high-state power-  
supply control signal to the secondary power-supply  
circuit in response to a start command signal output by  
5 the first driven circuit, the high-state power-supply  
control signal causing the secondary power-supply circuit  
to start the supply of the secondary voltage to the second  
driven circuit.

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                  3. The apparatus according to claim 1,  
wherein the control means outputs a low-state power-supply  
15 control signal to the secondary power-supply circuit in  
response to an end command signal output by the first  
driven circuit, the low-state power-supply control signal  
causing the secondary power-supply circuit to terminate  
the supply of the secondary voltage to the second driven  
20 circuit.

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4. A power control apparatus comprising:

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1           a first driven circuit;

          a second driven circuit connected to the  
first driven circuit;

          a primary power-supply circuit connected to  
5   a battery, the primary power-supply circuit producing a  
primary voltage from a source voltage of the battery and  
supplying the primary voltage to drive the first driven  
circuit;

          a secondary power-supply circuit connected  
10   to the primary power-supply circuit, the secondary power-  
supply circuit producing a secondary voltage from the  
source voltage of the battery or from the primary voltage  
of the primary power-supply circuit and supplying the  
secondary voltage to drive the second driven circuit;

15           a primary oscillation part for outputting a  
clock signal to the first driven circuit;

          a primary reset generating part for  
outputting a primary reset signal to the first driven  
circuit when an oscillation of the primary oscillation  
20   part is detected to be stable, the primary reset signal  
causing the first driven circuit to start operation in  
accordance with the clock signal output by the primary  
oscillation part;

          a control signal generating part, connected  
25   to both the first driven circuit and the secondary power-

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1 supply circuit, for outputting a power-supply control  
signal to the secondary power-supply circuit in response  
to a command signal output by the first driven circuit, so  
that the supply of the secondary voltage to the second  
5 driven circuit by the secondary power-supply circuit is  
started or terminated by the power-supply control signal;  
a secondary oscillation part for outputting  
a clock signal to the second driven circuit; and  
a secondary reset generating part for  
10 outputting a secondary reset signal to the second driven  
circuit when an oscillation of the secondary oscillation  
part is detected to be stable, the secondary reset signal  
causing the second driven circuit to start operation in  
accordance with the clock signal output by the secondary  
15 oscillation part.

20 5. The apparatus according to claim 4,  
wherein the secondary oscillation part includes a gate  
circuit and a phase-locked loop PLL circuit, the gate  
circuit having a first input connected to an output of the  
control signal generating part, a second input connected  
25 to an output of the primary oscillation part, and an

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1 output connected to an input of the PLL circuit, the gate  
circuit passing the clock signal from the primary  
oscillation part to the PLL circuit when a high-state  
power-supply control signal is received at the first  
5 input, the PLL circuit producing a clock signal with a  
locked frequency when a high-state clock signal output by  
the gate circuit is received, and supplying the clock  
signal to the second driven circuit.

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6. The apparatus according to claim 4,  
wherein the second driven circuit includes a buffer gate  
15 at an input of the second driven circuit, the input of the  
second driven circuit being connected to an output of the  
first driven circuit via a signal line, the buffer gate,  
when a data signal set in a high state by the first driven  
circuit is received from the signal line, converting the  
20 received data into a high-state data signal based on the  
secondary voltage.

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1                   7. The apparatus according to claim 6,  
wherein the buffer gate includes a resistor and a metal-  
oxide-semiconductor transistor connected in series between  
a secondary voltage line and a grounded base.

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10                   8. The apparatus according to claim 4,  
wherein the first driven circuit includes a gate circuit  
at an input of the first driven circuit, the input of the  
first driven circuit being connected to an output of the  
second driven circuit via a signal line, the gate circuit  
having a first input connected to the signal line and a  
15                   second input connected to an output of the control signal  
generating part, the gate circuit enabling the first  
driven circuit to receive a data signal from the signal  
line when a high-state power-supply control signal output  
by the control signal generating part is received at the  
20                   second input, and when the data signal that is set in a  
high state by the second driven circuit is received, the  
gate circuit converting the received data into a high-  
state data signal based on the primary voltage.

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1                   9. The apparatus according to claim 8,  
wherein the gate circuit includes a resistor and two  
metal-oxide-semiconductor transistors connected in series  
between a primary voltage line and a grounded base.

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10                   10. The apparatus according to claim 4,  
wherein the control signal generating part outputs a high-  
state power-supply control signal to the secondary power-  
supply circuit in response to a start command signal  
output by the first driven circuit, the high-state power-  
supply control signal causing the secondary power-supply  
15 circuit to start the supply of the secondary voltage to  
the second driven circuit.

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11. The apparatus according to claim 4,  
wherein the control signal generating part outputs a low-  
state power-supply control signal to the secondary power-  
supply circuit in response to an end command signal output  
25 by the first driven circuit, the low-state power-supply

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1 control signal causing the secondary power-supply circuit  
to terminate the supply of the secondary voltage to the  
second driven circuit.

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